

Application No./Date: 1983-103474 [1983/ 6/ 9]
Public Disclosure No./Date: 1984-228852  [1984/12/22]
Registration No./Date: 1716547 [1992/12/14]
Examined Publication Date (present law): []
Examined Publication No./Date (old law): 1988- 44390  [1988/ 9/ 5]
PCT Application No.:
PCT Publication No./Date: []
Preliminary Examination: ()
Priority Country/Date/No.: () [] ()
Domestic Priority: [] ()
Date of Request for Examination: [1983/ 6/ 9]
Accelerated Examination: ()
Kind of Application: (0000)
Critical Date of Publication: [1983/ 6/ 9] ()
No. of Claims: (1)
Applicant: ATOM CORP
Inventor: SAITO SUSUMU, WAKABAYASHI KEISUKE
IPC: A61M 5/00 ,320
FI: A61M 5/14 ,485D A61M 5/00 ,320
F-Term: 4C066AA07, BB01, CC01, DD12, EE14, FF04, HH03, HH05, QQ23, QQ58, QQ32, QQ44
Expanded Classification: 282
Fixed Keyword:
Citation:

[19,1986. 7. 8,04] (04,JP,Unexamined Utility Model Publication,1982076637)

[19,1986. 7. 8,04] (04,JP,Unexamined Utility Model Publication,1977043396)

[19,1986. 7. 8,04] (04,JP,Unexamined Patent Publication,1981031758)

[19,1987. 5.15,04] (04,JP,Unexamined Patent Publication,1973062289)

Title of Invention: TRANSFUSION APPARATUS

Abstract: Pressure in the pressure sensor niyotsute cylinder which slider was provided with is detected, abnormality such as needle foolishness to be able to put by the end of transfusion by comparing reference value to show abnormal condition to with this pressure, needle zumari is detected in *kaku, and transfusion is always performed safely. Pressure sensor 39 detecting fluid pressure in syringe 24 is installed in pressing department 22 pressing with sucker 25, sign S ? P ? R to show pressure to is added to initial value storage circuit 41 and pressure conversion circuit 42 through amplifier 40. This initial value storage circuit 41 offsets thing niyotsute pulling line tsuteirutokino pressure value by impregnation from this initial pressure value in pressure conversion circuit 42 with a thing storing pressure value when decommissioning time liquid is not poured, temperature drift, drag of syringe 24. Arch forming value evolution circuit 44, disconnection value evolution circuit 45 and each reference value to show abnormality of pressure to from abnormal value evolution circuit 46 are given comparison circuit 43, it is compared with pressure signal S ? P ? S, detection signal S ? A of abnormal condition is added to alarm signal generator 38.

Relation to Original Application: ()
Original Application No.: ()
Original Registration No.: ()
Retroactive Date: []
Assignment/License: (0)
Classification of Examiners Decision/Date:
(decision of registration(allowance)) [1992/ 4/ 7]
Final Examinational Transaction/Date:
(registration) [1992/12/14]
Kind of Examination: (01)
Examination Intermediate Record:
(A63 1983/ 6/ 9, PATENT APPLICATIONUTILITY MODEL
REGISTRATION APPLICATION,
6300:)(A621 1983/ 6/ 9, WRITTEN REQUEST FOR
EXAMINATION, 25500:)
(A131 1986/ 8/12, WRITTEN NOTICE OF REASON FOR
REJECTION, :)
(A522 1986/10/ 9, WRITTEN AMENDMENT, :)
. (A53 1986/10/ 9, WRITTEN OPINION, :)
(A131 1987/ 7/14, WRITTEN NOTICE OF REASON FOR REJECTION, :)
(A523 1987/ 9/11, WRITTEN AMENDMENT, :)
. (A53 1987/ 9/11, WRITTEN OPINION, :)
(A15 1988/ 5/24, DECISION OF PUBLICATION OF APPLICATION, :)
(A641 1988/12/ 3, WRITTEN OPPOSITION, 8800:)
(A651 1989/ 1/ 4, WRITTEN SUPPLEMENT OF GROUNDS FOR OPPOSITION, :)
(A364 1989/ 3/29, OPPOSITION RETURN, :)
(A17 1989/ 6/ 6, INVITATION TO REPLY, :)
(A57 1989/ 7/27, WRITTEN REPLY, :)
(A523 1989/ 7/27, WRITTEN AMENDMENT, :)
(A18 1989/10/31, INVITATION FOR REFUTATION, :)
(A318 1990/ 8/24, REFUTATION RETURN, :)
(A16 1992/ 4/ 7, DECISION OF OPPOSITION, :)
(A16 1992/ 4/ 7, DECISION OF OPPOSITION, :)
(A01 1992/ 4/ 7, DECISION TO GRANT A PATENTDECISION OF REGISTRATION, :)
) (A61 1992/ 5/ 6, PAYMENT OF ANNUAL FEE, :)

*** Trial No./Date: [] ***
Kind of Trial: [] ***
Demandant: -
Defendant: -
Opponent: -
No. of Opposition in Effect: ()
No. of Opposition Claims: ()()
Classification of Trial Decision of Opposition/Date:
() []
Final Disposition of Trial or Appeal/Date:
() []
Trial and Opposition Intermediate Record:

Registration Intermediate Record:
(R20 1997/ 7/16, A WRITTEN ANNUITY PAYMENT, 89600:01)
(R250 1997/ 8/19, A RECEIPT OF ANNUITY PAYMENT (INSTALLMENT PAYMENT), :
01) (R20 1998/ 8/ 7, A WRITTEN ANNUITY PAYMENT, 89600:02)
(R250 1998/ 9/18, A RECEIPT OF ANNUITY PAYMENT (INSTALLMENT PAYMENT), :
02) (R20 1999/ 9/17, A WRITTEN ANNUITY PAYMENT, 175200:03)
(R250 1999/10/26, A RECEIPT OF ANNUITY PAYMENT (INSTALLMENT PAYMENT), :)

03)

Amount of Annuity Payment: (12Years)
Extinction of Right/Lapse Date of Right:
(non-payment of annual fee) [2000/ 9/ 5]
Closed Register Filing Date: [2001/ 5/23]
Proprietor: 13-ATOM MEDICAL CORP
Status of Register: (removed to closed register)

2502184
040506